July 9, 2003

IN RE: DOCKET NO. 2002-367-C

COPY OF **DIRECT TESTIMONY OF JAMES E. SPEARMAN FILED ON BEHALF OF THE COMMISSION STAFF** HAS BEEN DISTRIBUTED TO THE FOLLOWING:

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McDaniel, Chief

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Legal Dept. (1)

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Exec. Director

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The Public Service Commission State of South Carolina

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July 9, 2003

Honorable Gary E. Walsh
Executive Director
Public Service Commission of South Carolina
Post Office Drawer 11649
Columbia, SC 29211

RE: Docket No. 2002-367-C – Proceeding to Address the Definition of "Abuse of Market Position"

Dear Mr. Walsh:

Pursuant to R.103-869 of the Commission's Rules and Regulations, I am herein enclosing the original and twenty-five (25) copies of the testimony intended to be offered by the one (1) witness for the Commission Staff in the above referenced proceeding. Copies of the testimony are being served on the parties of record as per attached Certificate of Service.

If I may be of further assistance, please do not hesitate to contact me.

Sincerely,

F. David Butler
General Counsel

FDB/hha
Enclosures

cc: All Parties of Record

BEFORE
THE PUBLIC SERVICE COMMISSION
OF
SOUTH CAROLINA

DOCKET NO. 2002-367-C

IN THE MATTER OF:

Proceeding to Address the Definition of "Abuse of Market Position"	))	**CERTIFICATE OF SERVICE**

I, Hope H. Adams, do hereby certify that I am employed by the Legal Department of the Public Service Commission of South Carolina, and I have on the date indicated below served the following named individual(s) with one (1) copy of the pleading(s) listed below by First Class U.S. Mail with sufficient postage attached and return address clearly marked.

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PLEADING(S): Testimony on behalf of Commission Staff: James E. Spearman, Ph.D., Research Department

LEGAL DEPARTMENT
Public Service Commission of South Carolina

Columbia, South Carolina
July 9, 2003

By: _____
Hope H. Adams, Administrative Assistant

ORIGINAL

Proceeding to Address the Definition of "Abuse of Market Position"

Docket No. 2002-367-C

Direct Testimony
James Spearman, Ph.D.
Research Department

Public Service Commission of South Carolina

Q. Please state for the record your name, business address and position with the Public Service Commission of South Carolina.

A. My name is James E. Spearman. My business address is 101 Executive Center Drive, Columbia, South Carolina. I am employed by the Public Service Commission of South Carolina as Research & Planning Administrator.

Q. Please summarize your educational background and professional experience.

A. I graduated from Pennsylvania State University with a Bachelor of Science in Mineral Economics and from the Darden School of the University of Virginia with a Master of Business Administration. I received a Doctor of Philosophy in Resource Economics from West Virginia University with specialization areas in Regional Economics and Trade and Development.

My professional experience includes being a member of the faculty at the University of South Carolina-Lancaster and Erskine College where I taught a variety of economics and business courses. I also taught economics courses as an adjunct professor in the Graduate Business Program of Morehead State University. My experience also includes employment as an Economist at the Federal Highway Administration, as a consultant at Foster Associates, Inc., and as a Senior Economist at Ashland Oil, Inc. I joined the Research Department of the Public Service Commission in October 1990.

Q. What is the purpose of your testimony?

The purpose of my testimony is to define "abuse of market position" and to attempt to determine whether various behaviors may constitute "abuse

of market position". Paragraph (B)(5) of Section 58-9-576 of the Code of Laws of South Carolina Annotated states, "The LEC's shall set rates for all other services on a basis that does not unreasonably discriminate between similarly situated customers; provided, however, that all such rates are subject to a complaint process for abuse of market position in accordance with guidelines to be adopted by the commission."

Q. What is the definition of "market power" and "abuse of market position"?

A. The statute uses the word "position" instead of "power." A person trained in economics or business would not apply the same meaning to the words "position" and "power." However, in this testimony I consider the words "position" and "power" to have the same meaning and to be interchangeable. The phrase "abuse of market position" would not be very meaningful unless the word "position" is given the same meaning as "power."

Defining "market power" or "abuse of market position" is both very simple and very difficult. In 1997 according to the Department of Justice, "Market power to a seller is the ability to profitably maintain prices above competitive levels for a significant period of time." Economic theory defines market power as, "The ability to alter profitably prices away from competitive levels." (Mas-Collel et al. 1995). Although these definitions sound very similar, they are significantly different. The Department of Justice definition refers only to prices above competitive levels. The economic theory definition allows for prices above or below competitive levels. The Federal Trade Commission considers market power to be a very complex issue and does not have a

generic definition of market power. It evaluates each complaint individually to determine if an "abuse of market power" has occurred.

It is critical to note that the existence of market power is not illegal. No market structure, by itself, is illegal. It is the misuse or abuse of market power that is illegal. A monopolist or dominant firm must engage in some activity, such as prolonged pricing above or below competitive levels, before "abuse of market position" can occur. Pricing above competitive levels for short periods of time may merely reflect a supply shortage. The Department of Justice and the Federal Trade Commission often take years to determine if an "abuse of market power" has occurred.

Although the ultimate intent of a company that is abusing its market position is to raise prices and profits above competitive levels, there are many actions a company may take to achieve this goal. For this reason, I think a more expansive definition of "abuse of market position" is required. I define abuse of market position as, "Any action that effectively prohibits a new firm from entering a market."

Q. How does a firm or company get market power?

A. Numerous factors contribute to the ability of a firm or company to gain market power. I will briefly discuss some of the more important or prevalent ones. Ownership or control of a critical resource can result in market power. Saudi Arabia has market power because it has the largest and most geological accessible petroleum reserves in the world. Capital intensive industries are often highly concentrated with one or a few dominant companies. Boeing and Airbus dominate the manufacture of large commercial airplanes. Large

economies-of-scale can create market power. When production costs increase significantly as the level of output increases. Only one or a few companies can profitably serve a market. The raw steel industry exhibits economies-of-scale. Technical and product innovations, particularly those that receive patents, can create market power. Pharmaceutical companies gain market power by developing and patenting drugs for specific illnesses. Market power can also be the result of legislation or regulation. South Carolina's Territorial Assignment Act gives electric utilities exclusive rights to serve retail customers in specific territories. Thus, each electric utility has market power in its assigned territory.

Retaining market power may be more difficult than attaining market power. Market forces often erode the ability of a company to maintain its dominance. Antitrust laws in the United States have been used frequently to eliminate market power and penalize companies for abusing market power.

Where market dominance tends to remain is in the utility industry. The electricity industry and the telecommunications industry, until very recently, have been considered natural monopolies. Natural monopolies usually exhibit large economies-of-scale and are capital intensive. Often they are considered essential to the public welfare and are regulated by some federal, state, or local agency. The intent of the Telecommunications Act of 1996 is to open the telecommunications industry to competition, and the Federal Energy Regulatory Commission along with some states are trying to open the electric industry to competition.

Q. Other than pricing, what types of behavior could result in an "abuse of market position"?

A. There are numerous means by which a dominant company can try to maintain its market power. I will briefly describe some of these behaviors. Advertising can be an effective means by which a company can differentiate its product from a competitor's product and build brand loyalty. Unless advertising is false or misleading, it is not illegal and would not be considered an "abuse of market position" by a dominant company.

The introduction of new or improved products or variations of existing products by the dominant company can be used to deter market entry by a competitor. This expansion of products removes gaps in the dominant company's product offerings that could be exploited by competitors.

Product bundling and product tie-ins are another means of restricting market entry. Product bundling is selling two or more products as a single package. The bundled products are combined in fixed proportions and are usually complimentary. Although the dominant company sells each product separately, a buyer pays a lower price if he purchases the bundled products than if he buys each product separately. A restaurant may sell both soup and sandwiches separately, but offer a combination of one soup plus one sandwich at a lower price. Tie-in sales are less restrictive in that the combination is not in fixed proportions. All that is required is that the purchase of some amount of one product is conditional on the purchase of some amount of another product. Product tie-ins are usually brand related. My Hewlett-Packard calculator will only operate with a Hewlett-Packard battery pack. Product bundling and tie-in

sales are generally attacked under Section 1 of the Sherman Act and Section 3 of the Clayton Act. The Supreme Court has been inconsistent in rulings concerning the illegality of product bundling and tie-in sales. In 1984 the Supreme Court ruled that three conditions must be met to violate antitrust laws: (1) the products must be distinct, (2) the firm tying the products must have sufficient monopoly power to force the purchase of the tied goods, and (3) the tying arrangement must foreclose, or have the potential to foreclose, a substantial volume of trade. (*Hyde v. Jefferson Parish Hospital District No. 2, et al.*, 466 U.S. 2, 15-18, 1984).

Expansion of output or output capacity by a dominant company can help to protect market power, especially if the dominant company has a cost advantage. If the dominant company has the capacity to supply all or most of the market for a product, a competitor is less likely to enter the market and create excess supply and the resulting lowering of price. Expansion of supply is not illegal unless it occurs in an attempt to keep out competitors. If a dominant company expanded its output capacity beyond its profit maximizing level, it may be an indication of predatory behavior by that company.

Mergers and consolidations are another method by which a dominant company may retain market power. A consolidation may be horizontal, vertical, or conglomerate. Horizontal consolidation occurs when a company merges with or acquires another company in the same industry. Verizon is the result of Bell Atlantic's purchase of NYNEX and GTE. A vertical consolidation occurs when a company mergers with or acquires a company at a different stage of the production stream. A film company acquiring movie theaters would be a

vertical consolidation. Conglomerate consolidations occur when companies whose products are neither direct substitutes nor complements merge. The merger or acquisition of a telecommunications company with a cable television company would be a conglomerate merger. All of these types of mergers may remove actual competitors or potential competitors from specific markets. The policy of the U.S. Department of Justice concerning mergers has become more flexible. In 1968 the Department of Justice would challenge any consolidation in an industry where the four-firm concentration ratio (CR4) exceeded 75 percent and the acquiring firm had a market share of as little as 4 percent.

CR4 = sales of 4 largest firms/ total industry sales

In 1982 the Department of Justice dropped the four-firm concentration ratio in favor of the Herfindahl-Hirschman Index (H-index).

$$\text{H-index} = \Sigma S_i^2$$

S_i = market share of the i^{th} firm

$0 \leq \text{H-index} \leq 10{,}000$

The threshold for intervention by the Department of Justice was set at an H-index of 1800.

Since 1992, the Department of Justice has focused on a fix-it-first philosophy concerning consolidations. Through negotiations with the merging companies, the Department of Justice tries to remedy potential anticompetitive concerns by contractual arrangement or consent agreements.

Q. Are any of these potential anticompetitive behaviors of greater concern to this Commission than others?

A. It is my opinion that price discrimination and product bundling and tie-in sales will be of most concern to this Commission. Control of a critical resource may also be a concern.

However, the Federal Communications Commission has provided detailed interpretations on the pricing provisions of the Telecommunications Act. Prices for telecommunications services are based on long-run incremental or marginal costs (MC) which are approved by this Commission. Therefore, it would be very difficult for a company to abuse its market position either by over pricing or under pricing its services. To the extent that retail prices (P) exceed the Commission approved long-run incremental costs, an abuse of market position could be indicated. The Lerner Index (L) could be used as a measure of market power.

$$L = (P - MC)/P$$

Although retail prices for services such as call waiting, call forwarding, and caller identification may not be regulated, these services are optional with the customer having a choice to purchase them or not to purchase them. These services could also be readily offered by competing carriers.

A company has a greater potential for abusing market power through product bundling and tie-in sales. Because of the highly technical nature of most telecommunications services, it would be nearly impossible for this Commission to determine if product bundling and tie-in sales are an abuse of market power or are justified based on the technology of the system without holding an evidentiary hearing.

An evidentiary hearing to determine if "abuse of market position" has occurred will probably be very technical and detailed. Alleged pricing abuse, both over pricing and under pricing, will require very detailed analysis of a company's costs. If the Commission determined that over pricing has occurred, it must also determine if the over pricing was sufficient to deter competition. If the Commission determined that under pricing occurred, it must also determine if the under pricing is a competitive response by the company or if it is an attempt by the company to prevent competition. When product bundling or tie-in sales abuse is alleged, the Commission will have to determine both the technical feasibility and economic feasibility of separating the services that are bundled or tied together for sale.

Q. Do you believe that this Commission can establish criteria or determine that a particular activity by a company is per se an abuse of market power?

A. No. The Telecommunications Act and the resulting Federal Communications Commission and various court rulings have, in my opinion, removed the obvious criteria or activities that would be considered per se abuses of market power. Companies will be more ingenious in their efforts, if any, to abuse market position. Therefore, this Commission must consider allegations of abuse of market power on a case-by-case basis. Unfortunately, this can not be done quickly or cheaply. This also requires technical expertise which this Commission has in very limited quantity.

Q. Does this conclude your testimony?

A. Yes.